FACTS ABOUT THE MOON’S ORBIT

The moon is approximately 384,401 kilometers from the earth. But is it always that far away?

The distance between the earth and the moon is constantly changing. A careful look at the moon at two different times during the year shows that the moon is closer at some times than at other times.



**Source:** John Walker, “Inconstant Moon, The Moon at Perigee and Apogee,” Fourmilab website, September 22, 2004, <http://www.fourmilab.ch/earthview/moon_ap_per.html>.

**Apogee and Perigee**

The distance from the earth to the moon changes because the moon does not orbit the earth in a perfect circle. Instead, the moon follows an elliptical orbit. This odd-shaped orbit places the moon closer at some times of the year. This is called the **perigee**. The moon is farther away at other times of the year. This is called the **apogee**.

The first picture of the moon was taken at its nearest point (perigee).The closest perigee between the moon and the earth is **356,375 km**.

The second picture was taken at the moon’s most distant point (apogee). The farthest apogee between the moon and the earth is **406,720 km**.